



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/506,443	02/18/2000	Tetsuji Kawazura	P21-9056	8222

7590 06/28/2002

ARENT FOX KINTNER PLOTKIN & KAHN  
1050 Connecticut Avenue, N.W. Suite 400  
Washington, DC 20036-5339

EXAMINER
----------

MULLIS, JEFFREY C

ART UNIT	PAPER NUMBER
----------	--------------

1711

14

DATE MAILED: 06/28/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/506,443

Applicant(s)

KAWAZURA ET AL.

Examiner

Jeffrey C. Mullis

Art Unit

1711

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 20 March 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

Art Unit 1711

This is in response to applicants' CPA request of 3-20-02.

All remaining rejections follow.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

<sup>14-17</sup>  
Claims 1-17 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Kawauzura et al.

Kawauzura et al. disclose a composition in which two different incompatible rubbers are blended with an ABA block copolymer which is a block compatible with one rubber component and incompatible with the other. Note column 4 lines 22-54 in this regard. While it is not clear that applicants'

Art Unit 1711

characteristics are inherent in the composition, all other features are present and these characteristics are therefore assumed to be inherent. Note also in this regard that the block copolymer which is used in the Examples may have a molecular weight of 640,000. Note Footnote 5 in column 26 for Table II-1 in this regard. Patentees' block copolymers therefore have very high molecular weights and furthermore natural rubber is known to have a molecular weight at most which is generally far below this. Since applicants' characteristic describes a blend of polymers containing a block copolymer of minimum molecular weight and since the molecular weight of the block copolymer of patentees is very high, it would reasonably appear that applicants' characteristics are met by the reference.

Campbell et al., U.S. 4,221,681, cited of interest discloses that natural and unsaturated synthetic polymers generally have a molecular weight of 70,000-300,000. Note column 2 lines 66-68 in this regard. It would therefore reasonably appear that the natural rubber component of Kawauzura et al. would have a molecular weight which is far less than the blocks of the highest molecular weight block copolymer used in the Examples.

Applicants' arguments filed 6-11-02 have been fully considered but they are not deemed to be persuasive.

Applicants' remarks regarding Zanzig are moot since this rejection has been withdrawn.

Art Unit 1711

With regard to Kawauzura et al., applicants argue that their molecular weight characteristics are not disclosed or suggested by Kawauzura et al. However for the reasons set out above, it reasonably appears that Kawauzura et al. presents examples containing materials having applicants' characteristics given the very high molecular weight of the block copolymer which may be used by Kawauzura et al. and that applicants' claims define a block copolymer having a minimum molecular weight below which the limitations of the claims are not met.

With regard to applicants' request for an interview, applicants may contact the Examiner to schedule an interview. Unfortunately there was no time for conducting an interview prior to this Office action since there was barely enough time to enter applicants' faxed amendment of 6-11-02.

Any inquiry concerning this communication should be directed to Jeffrey Mullis at telephone number (703) 308-2820.

J. Mullis:cdc

June 20, 2002

**Jeffrey Mullis**  
**Primary Examiner**  
**Art Unit 1711**

A handwritten signature in black ink, consisting of a large, stylized 'J' followed by a series of loops and a final vertical stroke.